Jorgensen, Leland

From: Kalakuntla, Vamshi (ASRC)
Sent: Tuesday, November 18, 2003 4:21 PM
To: Jorgensen, Leland
Subject: Draft prior art search strategy for 09/874128

Dear leland jorgensen,

Please find below a draft prior art search strategy for 09/874128.
Please edit - delete or add terms so that it reflects the novelty of
the application and targets the information you seek.
You can email back to me your changes or call me.
If I do not hear from you I will proceed.

Thank you for your time.

Vamshi Kalakuntla
ASRC Searcher
EIC 2600
CPK2 3C03
(703) 306-0254

s oled or organic(w)(led or light()emit?()(device? ? or diode? ?) or electroluminesc? or electro()luminesc? or el)
s white
s better or efficien? or effective or higher or lower or more or less or greater or lesser or (save or saves or saving)(3n)
(power or electricity or energy or charge or battery?)
s (color or colour or red or green or blue or red()blue()green or rgb)
s au=(Siwinski, m? or Siwinski m?)
s co=(EASTMAN(w)KODAK()COMPANY)
s ic=(G09G-003/32 or G09G-005/00)

IoP | electronic journals
Journal of Physics D: Applied Physics

J. Phys. D: Appl. Phys. **34** (21 October 2001) 3083-3087

A white organic light emitting diode with improved stability

Zhang Zhi-lin, Jiang Xue-yin, Zhu Wen-qing, Zhang Bu-xin and Xu Shao-hong
Department of Materials Science, Shanghai University, Jiading, Shanghai 201800, People's Republic of China

Received 27 February 2001
Published 9 October 2001

Abstract. A white organic light emitting diode (OLED) has been constructed by employing a new blue material and a red dye directly doped in the blue emitting layer. For comparison, another white cell with a blocking layer has also been made. The configurations of the devices are ITO/CuPc/NPB/JBEM(P):DCJT/Alq/MgAg (device 1) and ITO/CuPc/NPB/TPBi:DCJT/Alq/MgAg (device 2) where copper phthalocyanine (CuPc) is the buffer layer, N,N'-bis-(1-naphthyl)-N,N'-diphenyl-1.1'bipheny1-4-4'-diamine (NPB) is the hole transporting layer, 9,10-bis(3'5'-diaryl)phenyl anthracene doped with perylene (JBEM(P)) is the new blue emitting material, N,arylbenzimidazoles (TPBi) is the hole blocking layer, tris(8-quinolinolato)aluminium complex (Alq) is the electron transporting layer, and DCJT is a red dye. A stable and current independent white OLED has been obtained in device 1, which has a maximum luminance of 14 850 cd m^{-2}, an efficiency of 2.88 Lm W^{-1}, Commission Internationale de l'Eclairage coordinates of $x = 0.32$, $y = 0.38$ between 4-200 mA cm^{-2}, and a half lifetime of 2860 h at the starting luminance of 100 cd m^{-2}. Device 1 has a stability more than 50 times better than that of device 2.

URL: stacks.iop.org/0022-3727/34/3083
DOI: 10.1088/0022-3727/34/20/313
PII: S0022-3727(01)22281-5

◄ Previous article | Next article ► | This volume ▲ | Table of contents ▲

CONTENT FINDER Journal of Physics D: Applied Physics

Full Search Help Author: Vol/Year: Issue: Page/Article No: Find

Journals Menu | EJs Extra | Journal home | Search | Authors | Referees | Librarians | User Options | Help | Recommend this journal